LEHIGH RIVER BASIN

LAKES AND RESERVOIRS IN LEHIGH RIVER BASIN

01447780 FRANCIS E. WALTER RESERVOIR (formerly published as Bear Creek Reservoir).--Lat 41°06'45", long 75°43'15", Luzerne County, Hydrologic Unit 02040106, at dam on Lehigh River, 2,200 ft downstream from Bear Creek, and 5.0 mi northeast of White Haven. DRAINAGE AREA, 289 mi². PERIOD OF RECORD, February 1961 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum). REMARKS.--Reservoir formed by an earthfill embankment covered with a rock shell, with concrete spillway at elevation 1,450.0 ft. Storage began Feb. 17, 1961; reservoir first reached conservation pool in June 1961. Total capacity (elevation 1,450.0 ft) is 110,700 acre-ft of which 108,700 acre-ft is controlled storage above elevation 1,300.0 ft, (conservation pool). Dead storage is 2,000 acre-ft. Flow regulated by three gates and low-flow by-pass system. Reservoir is used for flood control and recreation. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 62,100 acre-ft, Sept. 28, 1985, elevation, 1,417.08 ft; minimum contents (after establishment of conservation pool), 980 acre-ft, July 6, 1982, elevation, 1,287.70 ft.

EXTREMES FOR CURRENT YEAR.—Maximum contents, 42,750 acre-ft, May 29, elevation, 1,399.27 ft; minimum contents, 1,660 acre-ft,

Dec. 26, Jan. 19, elevation, 1,298.22 ft.

01449400 PENN FOREST RESERVOIR.--Lat 40°55'45", long 75°33'45", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 0.7 mi upstream from hatchery, 2.6 mi upstream from Wild Creek Dam, 4.4 mi upstream from mouth, and 10.0 mi northeast of Palmerton. DRAINAGE AREA, 16.5 mi². PERIOD OF RECORD, October 1958 to current year. GAGE, water-stage recorder. Datum of gage is sea level (levels by city of Bethlehem).

REMARKS.--Reservoir formed by a roller-compacted concrete dam with ungated concrete spillway at elevation 1,000.60 ft (capacity, 18,510 acre-ft). Storage began October 1958. Reservoir is used for municipal water supply. Regulation by valves on pipe through dam. Figures given herein represent total contents and include diversion since October 1969 from Tunkhannock Creek Basin to Wild Creek Basin. COOPERATION.--Records provided by city of Bethlehem.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 20,800 acre-ft, Apr. 16, 1983, elevation, 1,001.69 ft; minimum contents, 0 acre-ft, many days during 1996, 1997, 1998, and 1999 water years, elevation, 890.60 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 18,730 acre-ft, Apr. 29, elevation, 1,001.03 ft; minimum contents, 15,420 acre-ft,

Mar. 2, elevation, 993.21 ft.

01449700 WILD CREEK RESERVOIR.--Lat 40°53′50", long 75°33′50", Carbon County, Hydrologic Unit 02040106, at dam on Wild Creek, 1.6 mi upstream from mouth, 2.4 mi south of hatchery, and 7.5 mi northeast of Palmerton. DRAINAGE AREA, 22.2 mi². PERIOD OF RECORD, January 1941 to current year. GAGE, nonrecording gage. Datum of gage is sea level (levels by city of Bethlehem).

KEMARKS.--Reservoir formed by earthfill dam with concrete ungated spillway at elevation \$20.00 ft. Storage began January 27, 1941; reservoir first reached minimum contents pool elevation in February 1941. Total capacity at elevation 820.00 ft is 12,500 acre-ft of which 12,000 acre-ft is controlled storage. Reservoir is used for municipal water supply. Regulation by valves on pipe through dam. Figures given herein represent usable contents and include diversion since October 1969 from Tunkhannock Creek Basin to Wild Creek Basin.

COOPERATION.--Records provided by city of Bethlehem.
EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 12,880 acre-ft, May 23, 1942, elevation, 822.93 ft; minimum contents (after filling), 2,680 acre-ft, Nov. 15, 1966, elevation, 774.10 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 12,160 acre-ft, May 14, elevation, 820.52 ft; minimum contents, 11,330 acre-ft, Oct. 8, elevation 817.30 ft.

01449790 BELTZVILLE LAKE.--Lat 40°50'56", long 75°38'19", Carbon County, Hydrologic Unit 02040106, at dam on Pohopoco Creek, 0.4 mi upstream from gaging station on Pohopoco Creek, 0.6 mi upstream from Sawmill Run, and 2.3 mi northeast of Parryville. DRAINAGE AREA, 96.3 mi². PERIOD OF RECORD, February 1971 to current year. GAGE, water-stage recorder (U.S. Army Corps of Engineers datum).

REMARKS.--Lake formed by an earth and rockfill dam with ungated, partially lined spillway at an elevation of 651.00 ft. Storage began Feb. 8, 1971. Capacity at elevation 651.00 ft is 68,300 acre-ft. Ordinary minimum contents (conservation) pool elevation is 628.00 ft, capacity, 41,250 acre-ft. Dead storage is 1,390 acre-ft. Lake is used for recreation, flood control, low-flow augmentation, and water supply. Figures given herein represent total contents. Regulation is accomplished by a multi-level water-quality outlet system, and two flood-control gates.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 49,730 acre-ft, Jan. 29, 1976, elevation, 636.30 ft; minimum contents, 10 acre-ft, Mar. 31, 1983, elevation, 588.79 ft.

EXTREMES FOR CURRENT YEAR .-- Maximum contents, 42,570 acre-ft, May 20, elevation, 629.37 ft; minimum contents, 39,660 acre-ft, Nov. 25, elevation, 626.33 ft.

LEHIGH RIVER BASIN

Lakes and Reservoirs in Lehigh River Basin--Continued

			Change in	,		Change in
		Contents	contents		Contents	contents
	Elevation	(acre-	(equivalent	Elevation	(acre-	(equivalent
Date	(feet)	feet)	in ft ³ /s)	(feet)	feet)	in ft ³ /s)
	01447780 Francis E. Walter Reservoir			01449400 Penn Forest Reservoir		
pt. 30	1,304.81	2,230		998.30	17,530	
et. 31	1,300.18	1,810	-6.8	995.23	16,240	-21.0
ov. 30	1,303.10	2,070	+4.4	993.47	15,520	-12.1
ec. 31	1,301.92	1,970	-1.6	993.86	15,680	+2.6
AL YR 2001			-0.7			-3.9
n. 31	1,304.53	2,200	+3.7	993.30	15,450	-3.7
b. 29	1,356.80	14,210	+216	993.25	15,430	-0.4
ar. 31	1,386.45	32,050	+290	995.65	16,410	+15.9
or. 30	1,392.08	36,520	+75.1	1,000.99	18,710	+38.7
ay 31	1,390.21	34,970	-25.2	1,000.78	18,600	-1.8
ne 30	1,392.52	36,890	+32.3	1,000.68	18,550	-0.8
ly 31	1,385.79	31,530	-87.2	1,000.36	18,410	-2.3
ug. 31	1,371.14	21,540	-162	997.38	17,150	-20.5
ept. 30	1,371.63	21,840	+5.0	995.45	16,330	-13.8
			+27.1			-1.7
TR YR 2002		 Wild Creek Ro			 790 Beltzvil	
TR YR 2002						
Ppt. 30	01449700	Wild Creek Ro	eservoir	01449	790 Beltzvil	le Lake
pt. 30	<u>01449700</u> 817.80	Wild Creek Re	eservoir 	<u>01449</u> 627.96	790 Beltzvil 41,210	le Lake
ppt. 30	01449700 817.80 818.83	Wild Creek Ro 11,470 11,750	<u>eservoir</u> +4.6	<u>01449</u> 627.96 627.71	790 Beltzvil 41,210 40,970	le Lake -3.9
pt. 30	01449700 817.80 818.83 818.35	Wild Creek Re 11,470 11,750 11,620	eservoir +4.6 -2.2	01449 627.96 627.71 626.60	790 Beltzvil 41,210 40,970 39,920	le <u>Lake</u> -3.9 -17.7
rpt. 30	01449700 817.80 818.83 818.35 818.24	Wild Creek Re 11,470 11,750 11,620 11,590	+4.6 -2.2 -0.5	01449 627.96 627.71 626.60 628.09	790 Beltzvil 41,210 40,970 39,920 41,340	 -3.9 -17.7 +23.1
pt. 30	01449700 817.80 818.83 818.35 818.24	Wild Creek Re 11,470 11,750 11,620 11,590	eservoir +4.6 -2.2 -0.5 +1.5	01449 627.96 627.71 626.60 628.09	790 Beltzvil 41,210 40,970 39,920 41,340	 -3.9 -17.7 +23.1 +1.0
pt. 30	01449700 817.80 818.83 818.35 818.24	Wild Creek Re 11,470 11,750 11,620 11,590 	eservoir +4.6 -2.2 -0.5 +1.5	01449 627.96 627.71 626.60 628.09 	790 Beltzvil 41,210 40,970 39,920 41,340 41,380	
pt. 30	01449700 817.80 818.83 818.35 818.24 818.02 818.35	Wild Creek Re 11,470 11,750 11,620 11,590 11,540 11,620	eservoir +4.6 -2.2 -0.5 +1.5 -0.8 +1.4	01449 627.96 627.71 626.60 628.09 628.14 627.97	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220	-3.9 -17.7 +23.1 +1.0 +0.7 -2.9
pt. 30	01449700 817.80 818.83 818.35 818.24 818.02 818.35 818.96	11,470 11,750 11,620 11,590 11,540 11,620 11,790		01449 627.96 627.71 626.60 628.09 628.14 627.97 628.25	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220 41,490	-3.9 -17.7 +23.1 +1.0 +0.7 -2.9 +4.4
pt. 30	01449700 817.80 818.83 818.35 818.24 818.02 818.35 818.96 819.91	11,470 11,750 11,620 11,590 11,540 11,620 11,790 11,980	eservoir +4.6 -2.2 -0.5 +1.5 -0.8 +1.4 +2.8 +3.2	01449 627.96 627.71 626.60 628.09 628.14 627.97 628.25 628.20	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220 41,490 41,440	-3.9 -17.7 +23.1 +1.0 +0.7 -2.9 +4.4 -0.8
rept. 30	01449700 817.80 818.83 818.35 818.24 818.02 818.35 818.96 819.91 820.24	11,470 11,750 11,620 11,590 11,540 11,620 11,790 11,980 12,070	eservoir +4.6 -2.2 -0.5 +1.5 -0.8 +1.4 +2.8 +3.2 +1.5	01449 627.96 627.71 626.60 628.09 628.14 627.97 628.25 628.20 628.13	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220 41,440 41,470 41,440 41,370	
rept. 30	01449700 817.80 818.83 818.35 818.24 818.02 818.35 818.96 819.91 820.24 820.08	11,470 11,750 11,620 11,590 11,540 11,620 11,790 11,980 12,070 12,020	eservoir +4.6 -2.2 -0.5 +1.5 -0.8 +1.4 +2.8 +3.2 +1.5 -0.8	01449 627.96 627.71 626.60 628.09 628.14 627.97 628.25 628.20 628.13 627.97	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220 41,440 41,370 41,220	
pt. 30 t. 31 v. 30 c. 31 L YR 2001 b. 29 ur. 31 pt. 30 pt. 31 pt. 32 pt. 31 pt. 29 pt. 31 pt. 29 pt. 31 pt. 30 pt. 31 pt. 31 pt. 31 pt. 32 pt. 32 pt. 31 pt. 32 pt. 32 pt. 33 pt. 31 pt. 32 pt. 31 pt. 32 pt. 31 pt. 32 pt. 32 pt. 33 pt. 31 pt. 32 pt. 33 pt. 31 pt. 32 pt. 31 pt. 32 pt. 32 pt. 33 pt. 31 pt. 32 pt. 33 pt. 31 pt. 32 pt. 33 pt. 34 pt. 35 pt. 35 pt. 36 pt. 37 pt. 37 pt. 37 pt. 37 pt. 37 pt. 37 pt. 38 pt. 39 pt. 39 pt. 30 pt. 31 pt. 32 pt. 32 pt. 32 pt. 33 pt. 34 pt. 35 pt. 35 pt. 36 pt. 37 pt. 38 p	01449700 817.80 818.83 818.35 818.24 818.02 818.35 818.96 819.91 820.24 820.08 817.70	11,470 11,750 11,620 11,590 11,540 11,620 11,790 11,980 12,070 12,020 11,450		01449 627.96 627.71 626.60 628.09 628.14 627.97 628.25 628.20 628.13 627.97 627.96	790 Beltzvil 41,210 40,970 39,920 41,340 41,380 41,220 41,440 41,370 41,220 41,210	-3.9 -17.7 +23.1 +1.0 +0.7 -2.9 +4.4 -0.8 -1.1 -2.5 -0.2